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AUTHOR Roberts, Charles V.
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ABSTRACT

A definition of intrapersonal communication is needed that will encompass noncognitive elements and thus allow for a broader range of research methodologies. One possible definition is the physiological and psychological decoding, processing, storing, and encoding of messages that happen within individuals at conscious and nonconscious levels whenever they communicate with themselves or others for the purposes of defining, maintaining, or developing their social, psychological, or physical selves. Such a definition differs from other conceptualizations in several ways. First, it considers both physiological and psychological processes. Second, it includes conscious and nonconscious communication processes. Third, it specifies functions that frame the intrapersonal domain. Finally, it extends the situations in which intrapersonal communication can be considered by focusing on the functions of intrapersonal communication rather than on the situations in which people find themselves. Broadening the definitional boundaries of intrapersonal communication to include physiological processes can give impetus to new research techniques and allow for additional insights into how and why various communication processes function. (HOD)

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THE DEFINITION AND DELIMITATION OF INTRAPERSONAL COMMUNICATION: A PHYSIOLOGICAL PERSPECTIVE

CHARLES V. ROBERTS
DEPARTMENT OF SPEECH
MCNEESE STATE UNIVERSITY
LAKE CHARLES, LOUISIANA 70609
(318-477-2520)

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The Definition and Delimitation of Intrapersonal Communication: A Physiological Perspective

In 1975, Andersen, Garrison, and Andersen noted the plethora of definitions of intrapersonal communication. The theoretical discussions of the last eight years have done little but increase the confusion concerning this concept. Certainly the concept of "self" has been imbedded in most definitions, but beyond that tautological definitional anchor, the directions taken by communication pundits have been to all points of the theoretical compass. Part of the confusion may be attributed to the cognitive, "paper and pencil self report" perspective of many of the theorists. In attempting to break out of this mentalistic definitional maze, we have limited the paths we can take by ruling out theoretical and methodological alternatives that encompass "unaware" data collection. We have focused on words, language, and symbol-using as manifest on the conscious level of the communicator. Some have argued forcefully and others have accepted tacitly that we need to do so lest we invade the territory of the psychologist, the sociologist, or the physiologist. The rationale for finding "the center that holds," for discovering that which makes us unique, is a compelling one. However,

a case can be made for accepting another focus, for establishing another "anchor".

Goldberg (1983) holds that no research method or approach is the exclusive property of any discipline. He states that

> Any event that involves one or more symbol users and/or that can be associated with the generation of or the sharing of meaning or that includes actions that can be described as communication acts whether they occur on an intrapersonal, interpersonal, group, organizational, or inter-organizational level is part of the content of the discipline. (p. 2)

Goldberg's "center" allows for a pluralistic approach to intrapersonal communication. He is not alone in making a case for a different theoretical and methodological focus. Carleton (1979) presents both substantive and functional rationales for treating communication as an "inherently interdisciplinary field."

> Because speech communication is situated where biophysical, conceptual, and social processes meet and where they exercise mutual influence over one another, students and scholars in speech communication must resist theoretic provincialism focusing on only one of these domains. (p. 333)

While it may appear that this argument concerns methodology more than it does definitions or theory building, methodological considerations are inexorably intertwined with theory building. There is no logical reason why we should not begin our investigations with a set methodology, but such a "cart before the horse"

approach may prohibit us from discovering important variables. It would seem prudent to first discover what it is that we should be studying before deciding what method we should use to study it. As Lana (1969) has pointed out, there have been many instances of logical and empirical limitations being placed upon theory building. "Theorists have embraced a particular methodology as being relevant for obtaining information about a given subject matter before they possessed any particular theory to explain it "(p. 126). He gives several pertinent examples of how this may disallow the discovery of important processes.

> To insist that all "meaningful" social behavior must be studied in toto and in situ may disallow the possibility that a researcher may discover that a good part of this behavior involves a simpler process, for example, fear conditioning (p. 126).

Definitions are key building blocks for theory. Any definition of intrapersonal communication accepted by a researcher will not only help shape his theory, but will guide his investigations and suggest his methodology as well. The intent of this paper is to suggest a definition of intrapersonal communication that incorporates more than just a cognitive element that will, in turn, allow for a broader range of methodologies for the investigation of intrapersonal communication.

The definition of intrapersonal communication that I wish to suggest is:

> All of the physiological and psychological decoding, processing, storing, and encoding of messages that happens within individuals at conscious and non-conscious levels whenever they communicate with themselves or others for the purposes of defining, maintaining, and /or developing their social, psychological, and/or physical selves.

This definition differs from other conceptualizations in several ways. First, it gives consideration to both physiological and psychological processes. Second, it includes both conscious (aware) and nonconscious (unaware) communication processes. Third, it specifies functions that frame the intrapersonal domain. Finally, it extends the situations in which intrapersonal communication can be considered by focusing on the functions of intrapersonal communication rather than on the situation in which the person finds himself. Intrapersonal communication is thus delimited by the "skin of the individual" and not by the number of other people present at the time of the communication act.

Based on the published research and theoretical treatises concerning intrapersonal communication, no argument is necessary for the inclusion of the psychological or cognitive domain in my definition. The majority of definitions of intrapersonal communication focus on the concept of "self". This focus has tended to channel research efforts towards mentalistic theories that have reinforced the dualistic conceptualization of "mind and body" and have restricted consideration of physiological variables. Broadening the definitional boundaries of intrapersonal communication to include physiological processes would

give impetus to new research techniques and allow for additional insights about how and why various communication processes function.

Speech communication researchers have tended to ignore physiological processes for a number of reasons. Some feel that the appropriate level of analysis and theorizing for the communication scholar is that of physical behavior, cognition, and emotion. The reasoning behind this stand represents a philosophical acceptance of the "mind-body" dicotomy. While the level of analysis of a problem must be consistent with the level of information desired as an answer to the problem, disallowing physiological data from consideration argues that that information is solely "structural."

> If one were interested in learning how a computer was wired, a physiological analysis of the computer would be appropriate. But if one were interested in a question such as "I wonder what language this computer is currently doing its computations in?" an input-output or a software analysis would answer the question far more easily than a look at the state, or changes in state, of the computer's circuits (Roberts and Steinfatt, 1983, p. 340-341).

Watzlawick et al(1967) suggest disregarding the internal structure and concentrating on specific input-output relations. "While it is true that these relations may permit inferences into what 'really' goes on inside the box, this knowledge is not essential for the study of the function of the device in the greater system of which it is a part" (p. 43-44). Moran and Halfond (1982) point out, even Watzlawick

couldn't maintain this restriction when talking about the communication process.

Physiological measurement/variables may entail "structural" or biological analysis, as is the case when brain hemisphere research is being done. But other physiological variables can be interpreted more accurately as "software", or input-output data. Chomsky's discussion of LADs and other biological-developmental theories are arguments for a "software" approach to physiological analysis. Johnson (1983) argues we need to examine the development processes of the human communication system if we wish to understand the nature of speech communication. If we wish to analyze and understand something as complex as human communication, "there has to be a consideration, in a systems sense, of all the factors which together form and influence the development of human communication" (Johnson, 1983, p. 201).

Further, if physiological data is used as "input-output" data, the level of analysis and the information desired would be consistent. Self report instruments are not the only way we can discern states of a mental concept. Indeed some researchers have attempted to assess "mental concepts" using physiological measurement. Martin (1961), Behnke and Carlile (1971), Myers (1974), Dabbs and Moorer (1975), Behnke and Beatty (1981), and Roberts and Steinfatt (1983) among others have used forms of physiological data to investigate cognitive processes. The

variety of possible measurement devices for probing physiological processes is great (Behnke, 1970; Roberts and Steinfatt, 1983). Perhaps the most measured form of intrapersonal communication is that of nervous or electrical communication, but metabolic and genetic communication measurement occurs as well. Brain wave measurement, skin conductivity/resistance, and muscle tension analysis seem to be popular. Analyses of hormones, bodily secretions, blood chemistry, temperature, volume, pressure, pulse, and heart rate are other measures. Genetic (biological structure) communication is seldom investigated using a physiological measurement device, though the results of genetic communication are widely discussed.

The reasons for not using physiological responses are as varied as the responses themselves. Behnke and Carlile (1971) suggest that is because "they are less accessible, more expensive to measure and more difficult to quantify" (p. 66). It may be that the time and effort that it takes to become familiar with a new methodology are too great an expenditure for the heretofore untrained speech researcher. Others may simply decide that though physiological inquiry is fine for some, they have no interest in it. By fractionating the investigation of intrapersonal communication into manageable problem units, investigating cognitive aspects and letting others investigate physiological concepts, the "task" of theory building can be done. The opposing

argument would suggest a parallel with the tale of the six blind men and the elephant. The task of reconstructing the whole may be as difficult given this approach as it was for "all the king's men."

When physiological variables do appear, by and large it is as mediating theoretical links. Some theories of the effects of televised violence suggest arousal as a link between violence and behavior (DeFleur and Ball-Rokeach, 1982). Dissonance theory and cognitive consistency theories in general suggest that a form of phenomenological clash produces arousal which leads to attitude or behavior change (Feldman, 1966). Much of the theorizing on shyness and communication apprehension relates situational and perception-of-situation variables to an intervening arousal state (Zimbardo, 1977; McCrosky, 1970). These theoretical links remain largely untested. Since most require the assessment of physiological states that are not directly acceptable by the individual experiencing them without the aid of mechanical devices, paper and pencil self reports are not appropriate measures for the communication researcher. Research into these theoretical connections has been hampered by our reluctance to use physiological measures to assess cognitive states. But the simple fact is that <u>all</u> of the communication within the individual is physiological. While we can create fine mentalistic concepts of cognitive processes, those processes <u>all</u> are carried on through one physiological process or another.

Some have argued that all psychological processes, whether part of the behavioral environment or part of the reflexive system of the organism, are untimately products of the organism's physiology (Lana, 1969). Lana, while not accepting the behaviorists "ultimate solution" of eventual reduction of all behavior to physiological processes, suggests that

> There is not logical reason why a great deal of psychological principles now and in the future may not be reducible to some of the derivatives of current or future physiological . . . theories (Lana, 1969, p. 145).

This reasoned and reasonable middle ground is one that I support. Much human activity may be impossible to explain by a physiological-reductionist approach, but many phenomena, from recency-primacy (Lana, 1969, p. 152), to the effect of ethos on rentention (Roberts and Steinfatt, 1983) may be explained physiologically.

Another possibility exists. It is possible that some human behavior can not be understood <u>without</u> knowledge of an individual's physiological state. Behnke and Beatty suggest that "neither physiological arousal not cognitive perception alone fully account for a particular emotion" (Behnke and Beatty, 1981, p. 159). Both need to coact to produce the emotion.

Whether physiological measurement is simply another way, or a better way, or a necessary way of investigating intrapersonal communication,

the result of its use may be to produce a greater understanding of human communication. "The incorporation of physiological state, communicative attempt, and resulting attitude change could result in a more general theory of communication and persuasion" (Bostrom, 1980, p. 174). When we open the "black box" we will discover much that is useful, but, most likely, we will find another black box as well.

The definition put forth previously suggests that intrapersonal communication takes place on both conscious and nonconscious levels. If this aspect of the definition is accepted, the prior discussion need not have been as lengthy. It is evident that the nonconscious level can be examined only indirectly, save with the use of physiological measurement. Self-reports concerning nonconscious processes are often not available. Indeed, the concept itself seems to be an oxymoron. "One of the most striking facts about self knowledge is that it may be lacking" (Skinner, 1953, p. 288).

Roloff forcefully argues that we have minimal reflection upon our "self" during much communication activity (Roloff, 1980). It may well be that our "noble" vision of man as a rational decision-maker who consciously decides his future behavior is not totally accurate. This does not mean that man does not control himself, however. Bostrom (1980) has suggested that one of the reasons physiological data is

not used is because of our strong negative reaction to the study of processes which we can not control. Of what use is information about our physiological behavior if we, as speech teachers, can not suggest methods for controlling them?

A great deal of evidence exists that points out that we can, do, and perhaps must control any physiological processes that we become aware of. Biofeedback research is strong on this point. My own philosophy of teaching intrapersonal communication is centered around this belief. People can become more effective communicators at all levels if they can make conscious contact with heretofore nonconscious events and states. This is not unique to my classroom. Most public speaking teachers attempt to have their students become "aware" of their delivery techniques so that they may control them. Interpersonal teachers seek to help their students escape "double binds" by becoming aware of them.

Accepting nonconscious data as appropriate for study does not necessarily mean that we need do away with the concept of "intentionality". Camden (1981) discusses how insights about the communication processes have been gained through psychophysiological experiments. He suggests that intentionality need not be on the level of awareness.

> Psycholophysiological studies do provide evidence that it is highly plausible that even behaviors controlled by the autonomic nervous system (and

> thus under involuntary control) can be controlled by an individual's conscious intention . . . It is not inconceivable, indeed it is highly probable, that most aspects of human behavior, from an unbuttoned button to even a skin rash are simply the results of an intentional command from one of several independent cognitive control centers (p. 10).

And one does not have to want to investigate "skin rashes" in order to accept a similar stance. If a researcher is interested in studying infant communication, he would have to accept a concept of unaware intention, since awareness of self is necessary before conscious choices can be made. Self consciousness follows the acquisition of language (Millar and O'Toole, 1981).

By concentrating on the functions of psychological and physiological constructs rather than on their location or make-up, much of the problem of deciding on which has the greater "truth value" dissolves. The dualist sees the "mind" as being different from the "body" and seems to treat the mind as some nonphysical, unpositioned entity. The materialist sees mental states as being completely reducible to physical states. Both have their own philosophical problems. The fact of the matter is, the mind is part of the body, and causal connections do exist. Further, for better or worse, regardless of how the materialists want to theorize, the concept of mental causation is deeply ingrained in everyday language and in their own theorizing about human

behavior. We talk about, think about, and behave as if our mind, both as a physical concept and a psychological concept, operates our body.

Fodor (1981), in an excellent discussion of the "Mind-Body Problem," writes about how "functionalism" makes sense of both the causal and relational character of the mental construct. While he does not believe that mentalistic concepts will ever be eliminated from the explanatory apparatus of psychological states, he recognizes that mental particulars may be physical; mental causation is a species of physical causation. "It is possible for the functionalist to assent both that mental properties are typically defined in terms of their relations and that interactions of mind and body are typically causal " (p. 119). For the functionalist, mental states are defined in terms of their causes and effects.

This discussion may lead one to believe that rather than delimit the field of intrapersonal communication I have eliminated all other fields. Certainly there are other situations and other variables present that do not fall within the bounds of intrapersonal communication. Research that focuses on interaction and channel would not be classified as intrapersonal. However, even in these cases there would be intrapersonal variables functioning and the collection of data concerning them might prove useful to the researcher. The common link or element in all communicative events is the individual communicator. While the

individual may move from interpersonal to public to intercultural context and be affected by those contexts in different ways, he remains relatively stable. Granted he may encode or decode differently in the various contexts, but the "hardware" and "software" he brings with him to each communication encounter changes slowly. It is the individual who is the "eye of the storm." It is in him and by him that order is given to the "booming, buzzing confusion" about him. Our investigation of that individual should not be limited by the social environment he is found in or by the methodological scruples that we bring with us to the research task. Some may argue that physiological data collection is the task of physiologist and physicists (and perhaps some back-sliding psychologists). I contend that while bringing this data to the surface of the organism is their province, the use of this data is well within the field of communication. This is not to say that none have done this. We have incorporated physiological linkages in our theories, have developed measurement devices to probe these connections, and have operationalized physiological variables as independent, dependent and contingent variables. Some of us even knew we were doing it! Others chose and continue to choose to consider these variables in a different light. I submit that "arousal" by any other name would still be related to a physiological state.

Defining intrapersonal communication in such a way as to allow for the consideration of both conscious and nonconscious data, of both physiological and psychological processes, and focusing on the functions of the underlying processes rather than the make-up of the organism, should increase the scope of future investigations of intrapersonal communication. McBath and Jeffrey (1978) predict, after recounting the countless efforts to define communication and related sub-categories within our discipline, that "we shall doubtless see more" (p. 181). They further suggest that such efforts stimulate "introspective analyses tht are essential to discipline-building" (p. 181). I am sorry that they did not choose to include intrapersonal communication as a major aspect of communication study. This lack of inclusion is understandable given their criteria of maturity, universality, and magnitude used to develop the taxonomy. I do hope that they applaud this effort at defining a sub-category of communication as they indicated they would and that the next taxonomy will include the category of "Intrapersonal Communication."

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